

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. §1251 et seq.; the "Act"),

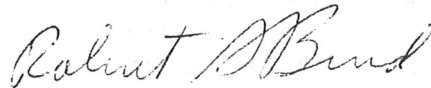
The Municipality of Anchorage
John M. Asplund Water Pollution Control Facility

is authorized to discharge from a facility located in Anchorage, Alaska, to receiving waters named Cook Inlet at latitude 61° 12' 22.5" N. and longitude 150° 01' 08.7" W., in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective October 16, 1985.

This permit and the authorization to discharge shall expire at midnight, October 15, 1990.

Signed this 16th day of September 1985.



Robert S. Burd, Director
Water Division, Region 10
U.S. Environmental Protection Agency

TABLE OF CONTENTS

Cover Sheet--Issuance and Expiration Dates

I. Effluent Limitations, Monitoring Requirements, Additional Requirements, and Compliance Schedules

A. Effluent Limitations

B. Monitoring Requirements

1. Overview
2. Data Coding and Submission Requirements
3. Definitions
4. Influent, Effluent, and Sludge Monitoring Requirements
5. Water Quality Monitoring Program
6. Biological Monitoring Program
7. Toxics Control Program Monitoring Requirements
8. Summary Tables

C. Additional Requirements

1. Construction
2. Toxics Control Program

D. Compliance Schedules

1. Construction
2. Toxics Control Program
3. Monitoring Reports

II. Monitoring, Recording, and Reporting Requirements

- A. Representative Sampling
- B. Monitoring Procedures
- C. Penalties for Tampering
- D. Reporting of Monitoring Results
- E. Compliance Schedules
- F. Additional Monitoring by the Permittee
- G. Records Contents
- H. Retention of Records
- I. Twenty-four Hour Notice of Noncompliance Reporting
- J. Other Noncompliance Reporting
- K. Inspection and Entry

III. Compliance Responsibilities

- A. Duty to Comply
- B. Penalties for Violations of Permit Conditions
- C. Need to Halt or Reduce not a Defense
- D. Duty to Mitigate
- E. Proper Operation and Maintenance
- F. Removed Substances
- G. Bypass of Treatment Facilities
- H. Upset Conditions

IV. General Requirements

- A. Planned Changes
- B. Anticipated Noncompliance
- C. Permit Actions
- D. Duty to Reapply
- E. Duty to Provide Information
- F. Other Information
- G. Signatory Requirements
- H. Penalties for Falsification of Reports
- I. Availability of Reports
- J. Oil and Hazardous Substance Liability
- K. Property Rights
- L. Severability
- M. Transfers
- N. State Laws

Figure 1. Sampling Station Locations in Knik Arm and Cook Inlet

I. EFFLUENT LIMITATIONS, MONITORING REQUIREMENTS, ADDITIONAL REQUIREMENTS, AND COMPLIANCE SCHEDULES

A. Effluent Limitations.

During the period beginning on the effective date of this permit and lasting until the expiration date, the discharges from the outfall shall be limited and monitored by the permittee as specified below:

1. The monthly average flow rate of effluent discharged from the wastewater treatment facility shall not exceed 44 mgd.
2. The pH shall not be less than 6.5 standard units nor greater than 8.5 standard units.
3. There shall be no discharge of floating solids, visible foam in other than trace amounts, or oily wastes which produce a sheen on the surface of the receiving water.
4. The Alaska Department of Environmental Conservation (ADEC) has designated the following mixing zones:
 - a. Fecal coliform bacteria. A circle with a radius of 245 m centered on the diffuser. Outside this zone, the fecal coliform limit of 14 FC/100 ml (based on a minimum of five samples taken in a period of 30 days) shall be met.
 - b. Residual chlorine. As described by the permittee in a letter to ADEC, dated June 1, 1984, this zone is approximately three-fourths of a circle, centered on the outfall, with a radius of 600 m. Following review of the first or any subsequent year's monitoring data, the Water Division Director, EPA, Region 10 (hereinafter referred to as the "Director"), in consultation with ADEC, may define a smaller mixing zone for residual chlorine and/or reduce the residual chlorine limits specified in 5. below.

5. The following effluent limitations shall apply:

<u>Effluent Characteristics</u>	<u>Unit of Measurement</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>
Biochemical Oxygen Demand (5-day)	mg/l lb/day	120 44,060	130 47,730	140 51,410
Suspended Solids	mg/l lb/day	100 36,720	115 42,230	130 47,730
Fecal Coliform Bacteria	FC MPN/100 ml	850 ^a		
Total Residual Chlorine	mg/l	1.2	---	1.4

^aGeometric mean of at least five samples. Not more than 10% of the samples shall exceed 2600 FC MPN/100 ml.

B. Monitoring Requirements.

1. Overview

The permittee shall implement the water quality, biological, and toxics control monitoring programs as described below. The purpose of these monitoring requirements is to determine compliance with applicable state water quality standards and the criteria in Section 301(h) of the Clean Water Act. The primary objectives of these programs are to: (1) characterize the effluent in detail, (2) monitor for discharge-related ecosystem impacts in areas of greatest expected impact, (3) assess whether these impacts warrant implementation of adjusted monitoring, (4) provide data to assess long-term or gradual degradation of the marine ecosystem in Knik Arm, and (5) provide data for evaluating reissuance of this permit.

The permittee shall provide the Director with an evaluation and interpretation of the analyzed data in relation to the magnitude and ecological significance of observed changes in the parameters measured. Potential changes in water quality, sediment chemistry, and biological parameters over time and with distance from the outfall, as well as accumulation of toxic pollutants and pesticides in organisms and examination of adverse effects, shall be addressed.

The permittee shall also periodically address, to the satisfaction of the Director, whether the program objectives are being met. Following review of the results from data analyses submitted by the permittee, the Director may adjust the frequency and extent of data collection specified in this permit. In general, expanded programs shall be implemented whenever adverse impacts are indicated or detected. Programs may be reduced if such a reduction will not interfere with EPA's ability to determine whether the permittee is in compliance with the appropriate provisions under 40 CFR 125 Subpart G. Monitoring programs shall be adjusted and implemented by the next scheduled survey whenever practicable.

Copies of all documents submitted to the Director shall also be submitted to ADEC, and all decisions to be made by the Director shall be made in consultation with ADEC.

The monitoring program described below is an extremely important part of this permit. Within three months of the effective date of this permit the permittee will present to the Director, for approval, a monitoring program plan that includes a Quality Assurance/Quality Control (QA/QC) program. This plan shall address the details of: (1) all monitoring procedures (e.g., methods to insure adequate preservation of composite samples, methods of station location and relocation, location of stations so that control and test sites are as similar as possible, identification of sampling gear to collect subtidal sediments, methods for granulometric and chemical analyses of subtidal

sediments, determination of a specific tidal height for initial intertidal sampling, laboratory bioassay methods); (2) monitoring objectives (long and short-term goals); (3) specific QA/QC procedures (including the detection limits and precision requirements that will insure that program objectives are met); (4) how data will be used to meet, test, and/or evaluate the monitoring objectives; and (5) other activities designed to achieve data quality goals for the monitoring programs.

Whenever possible, sampling stations will be located with a mini-ranger navigational aid or a mini-ranger which has been intercalibrated with a Loran C system. Other methods must have prior approval from the Director. The Director may modify, or authorize the modification of, the location of any station used to meet the requirements of this section (Part I.B.) at any time during the term of this permit.

2. Data Coding and Submission Requirements

The water quality, biological, and chemical data collected shall be coded in the format specified in the Ocean Data Evaluation System (ODES) Data Submissions Guidelines Manual and provided to the Director on a magnetic tape with the following characteristics: 9 track, density of 1600 BPI, maximum block size of 4000 bytes, fixed length records and character format either ASCII or EBCDIC. Other tape specifications may be required by Region 10 in the future.

These tapes containing the most recent data collected shall be supplied to the Director within two months following each sampling period. In addition, written reports (contents described in detail below), summarizing the data and addressing the objectives of each monitoring program, will be supplied as drafts to the Director within two months following submission of the tapes. Final reports shall be submitted whenever requested following review of the drafts by the Director. The use of ODES is recommended for data analyses prior to report preparation. An annual written report, comparing data across sampling periods and between years, shall be supplied to the Director by January 31.

3. Definitions

- a. The "monthly average," other than for fecal coliform bacteria, is the arithmetic mean of samples collected during a calendar month. The monthly average for fecal coliform bacteria is the geometric mean of samples collected during a calendar month.
- b. The "weekly average," other than for fecal coliform bacteria, is the arithmetic mean of samples collected during a calendar week. The weekly average for fecal coliform bacteria is the geometric mean of samples collected in a calendar week.

- c. A "24 hour composite" ("24 hr. Comp.") sample shall mean a flow-proportioned mixture of not less than eight discrete aliquots. Each aliquot shall be a grab sample of not less than 100 ml and shall be collected and stored in accordance with procedures prescribed in the most recent edition of Standard Methods for the Examination of Water and Wastewater.
- d. A "Grab" sample is a single sample or measurement taken at a specific time or over as short a period of time as is feasible.
- e. mgd = million gallons per day
- f. mg/l = milligrams per liter
- g. lb/day = pounds per day
- h. ZID = Zone of Initial Dilution. The ZID is defined by: (1) a square, 28.5 m on a side, with a corner 32.5 m beyond the center port of the diffuser, with the opposite corner 7.8 m behind the center port, and the diagonal coincident with the line of the outfall; and (2) the water column above that square.
- i. Toxic pollutants = Those substances listed in 40 CFR 401.15.
- j. Pesticides = Demeton, Guthion, Malathion, Mirex, Methoxychlor and Parathion (as listed in 40 CFR 125.58(M)).
- k. MPN = Most probable number.
- l. FC = Fecal Coliform Bacteria.
- m. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- n. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- o. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

4. Influent, Effluent, and Sludge Monitoring Requirements

a. The following monitoring requirements shall apply:

<u>Parameter</u>	<u>Sample Point</u>	<u>Sample Frequency</u>	<u>Sample Type</u>
Temperature	influent	daily	grab
	effluent	daily	grab
pH	influent	daily	grab
	effluent	daily	grab
Flow	effluent	continuous	
Total Residual Chlorine	effluent	continuous or every 2-4 hr.	grab
DO	effluent, prior to chlorination	daily	grab
BOD ₅	influent	4/week ¹	24 hr. Comp.
	effluent	4/week ¹	24 hr. Comp.
Settleable Solids	influent	daily	grab
	effluent	daily	grab
Suspended Solids	influent	5/week ¹	24 hr. Comp.
	effluent	5/week ¹	24 hr. Comp.
Total Solids	sludge, prior to thickening	4/week ¹	grab
Alkalinity	effluent	monthly ²	grab
Fecal Coliform Bacteria	effluent, follow- ing chlorination	3/week ¹	grab
Enterococci Bacteria	effluent, follow- ing chlorination	whenever sampled in receiving water	grab
Oil and Grease	effluent	weekly ³	24 hr. Comp.
Heavy Metals ⁴	influent	weekly ^{3, 5}	24 hr. Comp.
	effluent	weekly ^{3, 5}	24 hr. Comp.
	sludge	monthly ⁶	24 hr. Comp.
Cyanide ⁷ (Free & Total)	influent	weekly ^{3, 5}	24 hr. Comp.
	effluent	weekly ^{3, 5}	24 hr. Comp.
	sludge	monthly ⁶	24 hr. Comp.
Toxic Pollutants and Pesticides ⁸	influent	4/year	24 hr. Comp.
	effluent	4/year	24 hr. Comp.
	sludge	2/year	24 hr. Comp.

Footnotes

- ¹ Sampling shall be arranged so that each day of the week is represented each month. Periodic weekend sampling shall continue throughout the permit term. However, weekend sampling may be reduced if the permittee demonstrates, to the satisfaction of the Director, that such a reduction will still meet objectives (1) and (5) in Part I.B.1.
- ² Alkalinity shall be sampled only between July and December and only in year 1 of the permit.
- ³ Sampling shall be arranged so that each day of the week is represented each quarter (or each year, if the monitoring frequency is reduced to monthly). Periodic weekend sampling shall continue throughout the permit term. However, weekend sampling may be reduced if the permittee demonstrates, to the satisfaction of the Director, that such a reduction will still meet objectives (1) and (5) in Part I.B.1.
- ⁴ Heavy Metals includes As, Cd, Cu, Pb, Hg, Ni, Ag, Zn, and Total and Hexavalent Chromium. Values for each metal shall be reported as "total" (not "total recoverable").
- ⁵ Heavy metals and cyanide will be monitored weekly during years 1 and 4 of the permit and monthly during years 2, 3, and 5. Each year, the permittee shall address, to the satisfaction of the Director, whether monthly sampling is adequate to meet objectives (1) and (5) in Part I.B.1. If monthly sampling does not meet these objectives, weekly sampling shall be required.
- ⁶ Samples shall be collected on a day when influent and effluent are sampled.
- ⁷ Cyanide samples are three grabs, taken eight hours apart, preserved immediately and then composited after flow weighting.
- ⁸ Samples for toxic pollutants and pesticides shall be composites of hourly grabs collected during four periods (winter-dry weather; spring breakup-wet or dry weather; summer-wet weather; and summer-dry weather) in years 1 and 4, and in summer (wet and dry weather) in years 2, 3, and 5 (Part I.B.7.a.[1]). The sampling frequency may be increased by the the Director (Part I.B.7.a.[2]). Total hydrocarbons and total aromatic hydrocarbons shall be computed and reported for each sample.
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- b. Samples and measurements taken in compliance with the monitoring requirements shall be representative of the volume and nature of the monitored discharge.
- c. Analytical methods and associated quality control procedures for analysis of pollutants shall be as specified in 40 CFR 136. Fecal coliform and Enterococci Bacteria samples shall be analyzed using the most probable number (MPN) procedure as specified in EPA 600/8-78-017 (Microbiological Methods for Monitoring the Environment). Alternate methods may be used if approved by the Director.
- d. The permittee shall participate in EPA's Discharge Monitoring Report Quality Assurance (DMR-QA) performance studies by analyzing quality control samples as requested.

- e. Influent, effluent, and sludge monitoring results shall be reported as specified in Part II.D. (Reporting of Monitoring Results) with the exception of toxic pollutant and pesticide analyses which shall be reported as specified in Part I.B.7.a.(1). The first reporting period ends on the last day of the first month in which the permit becomes effective.
- f. If enterococci bacterial standards are adopted by the state or EPA during this permit term, the effluent monitoring requirement for fecal coliform bacteria shall be changed to require monitoring of enterococci bacteria at the same frequency.

5. Water Quality Monitoring Program

- a. The objective of this program is to determine compliance with applicable state water quality standards and the criteria in Section 301(h) of the Clean Water Act.
- b. Water quality must be monitored in the vicinity of the ZID boundary, beyond the ZID, and at control or reference sites. Station numbers refer to the list of stations in Section (4), below and Figure 1. Upon approval from the Director, station locations may be modified. Each time sampling is required (see Section c. below), it will take place as follows:

- (1) First Year's Sampling. Nonfixed stations will be sampled during cruises made during a consecutive flood and ebb tide. Each cruise shall be made by following the track of a drogue released above the diffuser. Data from a minimum of three cruises made on a single flood-tide and three cruises made on the ebb-tide immediately following the flood-tide shall be analyzed for water quality impacts. Stations shall include, but not be limited to: Above the diffuser (Station 0); as close to the ZID boundary as practicable (Station 1); several stations in the channel in Knik Arm and Cook Inlet; and the shallow subtidal (before the drogue grounds).

Three flood-tide control cruises shall be similarly conducted in conjunction with or as soon as practicable following the cruises described above. The control cruises shall begin at a fixed station (Station C1) having the same water depth as the outfall and located due north across Knik Arm from Pt. Woronzof, near Pt. Mackenzie.

Each year, the permittee shall evaluate, to the satisfaction of the Director, the monitoring data submitted under this program and determine whether this sampling approach is meeting or can be adjusted to meet the objectives of the water quality monitoring program. If the objectives are not met or cannot be met using this approach, the program in Section (2) below shall be implemented.

- (2) Fixed Station Sampling. If the fixed station sampling program is implemented, the following stations shall be sampled at slack high water: Stations 1 and 2; at least three from 3, 4, 6, 9, 10, and 12; and C1 and C2. This flexibility in choice of stations will allow sampling in the area of the discharge and/or along the plume, as appropriate.

Upon review of each year's monitoring data collected under this program, the permittee will address, to the satisfaction of the Director, whether the objectives of the water quality monitoring program are being met. Based upon each review, the Director may adjust the sampling frequency or station locations, remove stations from the program, and/or require monitoring at any or all offshore stations in section (4) below (stations 1-13 and C1-C3).

- (3) Intertidal Sampling for Bacteria. Monitoring of fecal coliform and enterococci bacteria will be conducted at eight intertidal stations (16-22 and C4) in summer in conjunction with the water quality monitoring program.

Two replicate water samples will be gathered from the shallow waters (one to three feet deep at slack high water) at these stations.

Sampling will also be conducted in spring and fall of years 1 and 4 at five stations (16-19 and C4). Based on these results, the Director may require seasonal monitoring at any or all stations (16-22 and C4) in years 2, 3, or 5.

(4) Sampling Stations:

<u>Station #</u>	<u>Station Location*</u>	<u>Latitude</u>	<u>Longitude</u>
0.	Above the outfall diffuser	61° 12' 22.5"	150° 01' 08.7"
1.	ZID boundary (depth = 3.7 m)	Midpoint of the "downstream" (depending on the tide) boundary of the Zone of Initial Dilution (ZID)	
2.	50 m: northeast, if flood tide northwest, if ebb tide Approx. 20 m beyond the ZID (depth = approx. 4 m)	61° 12' 23.9"	150° 01' 07.2"
		61° 12' 23.1"	150° 01' 11.8"
3.	250 m northeast (depth = 6 m)	61° 12' 29.7"	150° 01' 01.1"
4.	750 m northeast (depth = 6 m)	61° 12' 34"	150° 00' 23"
5.	2000 m northeast (depth = 9 m)	61° 12' 51"	149° 59' 07"

6.	2000 m east (depth = 6 m)	61° 12' 36"	149° 58' 56"
7.	2000 m east (in gyre; depth = 5 m)	61° 12' 25"	149° 58' 53"
9.	250 m northwest (depth = 6 m)	61° 12' 25.5"	150° 01' 24.2"
10.	750 m southwest (depth = 6 m)	61° 12' 07"	150° 01' 46"
11.	2000 m west (depth = 9 m)	61° 12' 06"	150° 03' 18"
12.	2000 m southwest (depth = 6 m)	61° 11' 30"	150° 02' 25"
13.	4000 m west-southwest (depth = 9 m)	61° 11' 36"	150° 05' 19"
16.	2000 m east (intertidal)	61° 12' 10"	149° 58' 55"
17.	1200 m east (intertidal)	61° 12' 11"	149° 59' 50"
18.	750 m east (intertidal)	61° 12' 15"	150° 00' 20"
19.	250 m east-southeast (intertidal)	61° 12' 19"	150° 00' 52"
20.	250 m south (intertidal)	61° 12' 15"	150° 01' 10"
21.	750 m southeast (intertidal)	61° 12' 02"	150° 01' 28"
22.	2000 m southwest (intertidal)	61° 11' 22"	150° 01' 28"

Control Stations

C1.	North, across from 1 (depth = 3.7 m)	61° 14' 14"	150° 01' 08.7"
C2.	North, across from 1 (depth = 6 m)	61° 14' 12"	150° 01' 08.7"
C3.	North, across from 1 (depth = 9 m)	61° 13' 54"	150° 01' 08.7"
C4.	North, across from 1 (intertidal)	61° 14' 26"	150° 01' 08.7"

* Distances and direction from the outfall diffuser. Station locations for 16-22 and C1-C4 are guidelines; exact locations used must be approved by the Director and recorded in all data submissions.

- c. Stations will be sampled each year: (1) in the early spring following breakup of the ice pack in Cook Inlet; (2) during a mid-summer period representative of dry weather conditions and lowest ambient dissolved oxygen; and (3) in late fall prior to formation of the ice pack.

After review of at least one year's data submitted under Part I.B.5.b.(1) (or Part I.B.5.b.(2), if this latter section is implemented), if the permittee demonstrates, to the satisfaction of the Director, that there is no substantial change in receiving water quality parameters with season, the frequency of sampling for any or all of these parameters in

years 2, 3, 4, and 5 of this permit may be reduced to sampling only during summer. As part of this determination, the Director will consider whether water quality within and at the boundary of the ZID is within receiving water quality standards or is within the range of values measured at the control stations.

- d. The following parameters will be measured at the depths indicated. Profile measurements shall be made at 1 m to 3 m intervals throughout the water column (an in situ electronic profiling measuring system which is calibrated at least once per day is preferred):

<u>Surface (above 0.5 m)¹</u>	<u>Surface, Mid-depth, and Bottom²</u>	<u>Profiling</u>
fecal coliform bacteria ³	dissolved oxygen (DO)	pH
enterococci bacteria ³	turbidity	temperature
Color		salinity
Total residual chlorine (total oxidants)		(conductivity)
Total hydrocarbons ⁴		
Total aromatic hydrocarbons ⁴		

Footnotes

¹ At each station where surface samples are collected, the presence or absence of the following shall be reported: Floating solids, visible foam in other than trace amounts, and oily wastes which produce a sheen on the surface of the receiving water (see Part I.A.3.).

² Following submission of data on DO and turbidity, the Director may require monitoring for BOD₅ and SS in the receiving water at any stations listed in Section (4) if these values are necessary to determine compliance with water quality standards.

³ All water samples for fecal coliform and enterococci bacteria analyses shall be collected in a standard manner from within the surface (15-30 cm) layer. Sterilized widemouth polyethylene containers are recommended. A minimum of four bacteria samples shall be collected on the first cruise of each of the flood, ebb, and control flood sets of cruises. Whenever fecal coliform and enterococci bacteria are measured in surface waters, they shall also be measured in the effluent. If an enterococci bacterial standard is adopted, monitoring for fecal coliform bacteria in the receiving water shall not be required.

⁴ The permittee shall determine, to the satisfaction of the Director, whether these two parameters have been detected in the effluent and whether water quality standards applicable to each parameter are approached (i.e., whether effluent concentrations are greater than 75% of the standard) after the dilution ratio of 25:1 is applied. Based on these determinations, the Director may require monitoring for either parameter in the receiving water at any of the stations or cruises under Sections b (1) or b (2), above.

- e. Receiving water quality monitoring data will be supplied to the Director on the magnetic tapes and as written reports as described under Part I.B.2. The data for each station will be included as an appendix to the reports and will show vertical profiles on a single graph for each station for the following parameters: DO, turbidity, pH, temperature, and salinity. Annual reports will compare results across sampling periods and between years. All reports will address compliance with water quality standards by using appropriate descriptive and statistical methods to test for and to describe any impacts of the effluent on water quality.

Any violations of State water quality standards will be reported to the Director and ADEC within 24 hours as required by Part II.I.

6. Biological Monitoring Program

- a. The objective of this program is to evaluate the impacts of the discharge on the marine biota. The benthic surveys and sediment analyses shall be conducted in years 1 and 4 of this permit and bioaccumulation studies shall be conducted in years 2 and 4 of this permit. These studies shall be coordinated, to the extent practicable, with the sampling times specified for the water quality monitoring program (Part I.B.5.c.) as described below.

The data collected during each sampling period of the biological monitoring program will be submitted to the Director on magnetic tapes and as written reports as described under Part I.B.2.

Monitoring required under this program may be adjusted by the Director to allow changes in station number and location and in sampling frequency or replication, following a review of any data analyses submitted by the permittee. The criteria for adjusting each component are given in the appropriate Sections (b)-(d), below.

b. Benthic Macroinvertebrate Surveys

- (1) The purpose of these surveys is to compare the spatial and temporal variability of: (1) intertidal benthic communities in depositional areas near the outfall; and to the extent practicable, (2) the subtidal benthic community at the boundary of the ZID; with those communities in reference sites, to determine if any of these communities are affected by the discharge.
- (2) Sampling Locations and Frequency. Sampling to characterize the existing communities will occur once in summer in years 1 and 4 of this permit, at three depositional intertidal stations (16, 17, and C4,

or similarly located stations), and if practicable, at two subtidal stations (the ZID boundary [station 1] and control station C1, or similarly located stations). At each intertidal station, ten replicate samples will be taken of the upper 10 cm layer (for mud or sand; upper 4-10 cm for gravel) using a core at least 15 cm in diameter.

To the extent practicable, ten replicate samples shall be collected at each subtidal station by using gear that will provide at least semi-quantitative samples of the benthic community. If only semi-quantitative or qualitative samples are possible at the subtidal stations, the number of replicates can be relaxed to five.

Initially, a fixed tidal height shall be chosen for intertidal sampling. However, the permittee shall address whether stratified sampling by tidal height, vegetation, or obvious discontinuities is warranted.

Whenever benthic samples are collected, sediment samples shall be collected and processed for TVS and granulometric analyses as specified in Part I.B.6.c.(2).

- (3) Adjusted Monitoring. Based on the results of any survey, the Director may adjust the sampling frequency and/or design.

As part of the criteria for determining whether benthic monitoring shall be adjusted, the permittee shall address, to the satisfaction of the Director, whether the objectives specified in Part I.B.6.b.(1) are being met.

The results and analyses of any required surveys will be provided to the Director on tape and in written reports, as described in Part I.B.2.

- (4) Sample Processing and Analysis. The odor and color of the sediment and other appropriate field notes will be taken for each sample collected. Sediments collected will be passed through a set of two standard graded sieves with 1.0 mm and 0.5 mm mesh screens respectively. Organisms which are retained on each sieve shall be processed separately and shall be identified to the lowest possible taxonomic level (usually species).

All benthic organisms collected will be held for five years and the Director will be contacted before any samples are discarded. The permittee will maintain a reference collection of all species collected and provide the Director with a list of the names and experience of those persons responsible for identifying the benthic organisms.

The permittee's quality assurance/quality control program (within its monitoring program plan; see Part I.B.1.) will address items such as resorting and taxonomic verification of benthic samples.

The following information or statistical analyses for each replicate or station sampled will be included in the written report:

- number of individuals of each species collected from each replicate and station sampled
- total number of species and number of individuals per replicate and station (the range and standard deviation for each station will also be reported)
- biomass (damp-dry wet weight) by major taxonomic groups (Phylum or Class) (the range and standard deviation for each station will be reported)
- species diversity and dominance for each replicate and station (the range and standard deviation for each station will be reported)
- cluster analysis for all replicates
- measurements of the biotic variables/indices as a function of distance from the outfall compared in the context of the Pearson-Rosenberg model¹
- other analyses as appropriate

The analysis of subsequent-year monitoring data will include appropriate statistical comparisons of important environmental and ecological parameters and indices from previous sampling years.

c. Sediment Analyses

- (1) The objective of this monitoring program is to determine patterns of organic enrichment, grain size distribution alteration, and pollutant contamination.
- (2) Sampling Locations, Frequency and Analysis. Samples of the top 2 cm will be collected from the following stations (or similarly located stations): intertidal stations 16, 17, and C4; and, if practicable, subtidal stations 1 and C1. At each station, samples will be collected at random and analyzed as follows: two samples

¹ Pearson, T.H. and R. Rosenberg 1978 Macrobenthic succession in relation to organic enrichment and pollution of the marine environment. Oceanogr. Mar. Biol. Ann. Rev. 16, 229-311.

for total volatile solids (TVS); two samples for toxic pollutants and pesticides; and two samples for sediment grain size distribution.

If sediment samples are collected from gravel or cobble substrates, analyses for grain size distributions shall be done on representative samples, but analyses for TVS and for pollutants and pesticides shall be done on the finer size fractions (silt and clay fractions, combined).

Samples for analyses of TVS will be collected in spring, summer, and fall in year 1 and in summer in year 4 of this permit. Samples will be collected for toxic pollutants and pesticides and for grain size distributions in summer during years 1 and 4 of this permit. The test procedures specified in 40 CFR Part 136 or other methods approved by the Director must be used to perform the analyses for toxic pollutants and pesticides.

Data analyses shall be presented in the written reports as mean values and standard deviations by station, for each parameter measured.

- (3) Adjusted Monitoring. TVS, grain size distribution, and/or sediment pollutant monitoring may be adjusted by the Director (as discussed in Part I.B.6.a.) following review of data analyses submitted by the permittee. As part of the basis for any adjustments, the permittee shall address, to the satisfaction of the Director:
- (1) whether the effluent is contributing to increased TVS content and/or pollutant concentrations at the boundary of the ZID or in depositional areas; and
 - (2) whether seasonal changes in TVS in year 1 were detected.

Sediment analyses for TVS, pollutants and pesticides, and for grain size distributions shall be conducted at least once at, and concomitant with, any additional or relocated benthic monitoring stations specified as part of an adjusted program under Part I.B.6.b.(3).

Sediment samples must be collected and analyzed for TVS and grain size distribution whenever sediment samples are analyzed for toxic pollutants and pesticides.

d. Bioaccumulation

- (1) Overview. The bioaccumulation study in Section (2) or (3) below (as appropriate), shall be conducted during summer of years 2 and 4 of this permit in order to detect whether any substantial bioaccumulation is occurring in the benthic community. Details of the sampling plan, including selection of an appropriate test species, shall be submitted to the Director for approval as part of the monitoring program plan specified in Part I.B.1.

As a minimum, the sampling plan shall describe those samples to be collected in the field at depositional and control sites with sufficient replication to determine whether bioaccumulation is greater at the depositional site.

The permittee shall, to the satisfaction of the Director, review the data from the benthic macroinvertebrate surveys or other sampling efforts designed to aid in the selection of a suitable test species. If sufficient biomass of a suitable test species can be collected from a minimum of two of the benthic survey stations (which must include station C4 and either station 16 or 17; or similarly located stations), for replicate tissue analyses, then the field study in Section (2) shall be implemented.

If projections based on the surveys demonstrate that sufficient biomass cannot be collected after sampling a total of 3 m² for intertidal stations, or if subtidal sampling is not practicable, then those stations shall not be part of the field study. If the minimum station requirements set forth above cannot be met, then the laboratory study in Section (3) shall be implemented in lieu of the field study.

Results from analyses will be provided to the Director both on tape and as a summary written report as specified in Part I.B.2. The written report shall include a list comparing the names, concentrations, detection limits, and sample type for all toxic pollutants and pesticides looked for in tissue samples and in the most recent sediment and effluent samples.

- (2) Field Study. The applicant will collect, during the summer, from each of those benthic survey stations (C1, C4, 1, 16, 17 or similarly located stations) that meet the criteria set forth in Section (1) above, two composite samples of tissue of a suitable test species. Each sample shall be analyzed for toxic pollutants and pesticides.
- (3) Laboratory Study. The sampling plan shall address the details of the laboratory study to be conducted if a field study cannot be implemented. As a minimum, the sampling plan shall include descriptions: of (1) the hypotheses to be tested, (2) sampling design (requiring a minimum of two replicates), (3) sampling methods, (4) statistical analyses, (5) QA/QC, and (6) preliminary testing necessary to insure the study will meet the objectives of the bioaccumulation monitoring program.

At the beginning of this study, two random, composited samples of the test organism shall be obtained from the overall pool collected for distribution to the test chambers. Each sample shall be analyzed for toxic pollutants and pesticides.

- (4) Adjusted Monitoring. The field or laboratory bioaccumulation study may be adjusted by the Director (as discussed in Part I.B.6.a.) following the review of data submitted as the results of either the study in year 2 or in year 4. In particular, the Director shall determine whether either study must be repeated in years 3 and/or 5 of this permit. As part of the basis for this decision, the permittee shall evaluate, to the satisfaction of the Director, whether any substantial bioaccumulation has been detected.

7. Toxics Control Program Monitoring Requirements

a. Chemical Analyses

- (1) The permittee shall monitor the treatment plant influent, effluent, and sludge for toxic pollutants and pesticides.

Influent and effluent of the treatment facility shall be sampled in summer in conjunction with the Water Quality Monitoring Program under both wet and dry weather conditions each year. Sampling shall also occur in winter (dry weather) and spring breakup (wet or dry weather) in years 1 and 4 of this permit (i.e., a total of four influent and four effluent samples in years 1 and 4, and a total of two influent and two effluent samples in years 2, 3, and 5).

Final sludge shall be sampled twice a year, once during dry weather flow in summer and once in winter (during wet weather flow, if possible).

Data from the toxics control monitoring program shall be supplied to the Director on tapes and as written reports as specified in Part I.B.2. These reports will list all pollutant concentrations and their percent removal.

Total hydrocarbons and total aromatic hydrocarbons shall be computed and reported for each sample.

- (2) Adjusted Monitoring. After each year's sampling, the permittee shall estimate the concentrations of toxic pollutants and pesticides at the boundary of the ZID by applying a 25:1 dilution ratio (or a lesser dilution ratio, if so determined from water quality monitoring) to

the effluent concentrations and compare the results with water quality criteria and standards.

If any toxic pollutant or pesticide has a concentration at the ZID boundary that exceeds 25% of the federal water quality criteria value for that pollutant, or if any pollutant or pesticide approaches the concentration documented to cause adverse biological impacts, that compound, once identified, shall be measured in the influent and effluent every winter (dry weather), spring breakup (wet or dry weather), and summer (wet and dry weather) for the remainder of the permit, unless that compound is not detected in the effluent during the subsequent three sampling periods.

The dry weather flow sample shall be collected no less than five days following a rainfall of measurable intensity. Influent samples shall be collected just before influent enters the barminuter. Effluent samples shall be collected after effluent leaves the primary sedimentation tanks.

Any change in operations or in the character of pollutants being introduced into the treatment facility that would significantly change the level of toxic pollutants and pesticides being discharged shall be assessed by sampling of the effluent as specified above after the change.

All samples shall be 24-hour composites consisting of incremental samples collected every two hours. Detection limits of the analytical methods used must allow the Director to determine whether receiving water quality criteria are met. The test procedures specified in 40 CFR Part 136 or other methods approved by the Director must be used to perform the analyses for toxic pollutants and pesticides.

- (3) Identification of Additional Constituents. In addition to analyzing for those toxic pollutants and pesticides specified above, the permittee shall make a reasonable attempt using GC/MS analytical techniques to identify and quantify the ten most abundant constituents of each effluent extract. This attempt shall exclude priority pollutants and unsubstituted aliphatic compounds but shall include those compounds shown to be present by peaks on the total ion plots (reconstructed gas chromatograms). A peak shall be analyzed if it has an area more than ten times greater than the standard deviation of the area of the adjacent background noise.

Identification shall be attempted through the use of the USEPA/NIH computerized library of mass spectra, with visual confirmation by an experienced analyst. Quantification may be an order-of-magnitude estimate

based upon comparison with an internal standard. It must be recognized that this is a screening tool for potentially toxic compounds.

b. Pretreatment Program Sampling Requirements

Analysis of the influent, effluent, and sludge for heavy metals, cyanides, toxic pollutants, and pesticides as listed in Part I.B.4.a. is sufficient to meet these requirements.

8. Summary Tables

a. Monitoring Requirements

PROGRAM AND STATION #'S	REPLI- CATES	FREQUENCY OF SAMPLING IN PERMIT YEAR #:				
		1	2	3	4	5
WATER QUALITY MONITORING						
Nonfixed Stations Sta=0,1,C1,Others	(1)	Sp,S,F	<u>Sp,S,F</u>	<u>Sp,S,F</u>	<u>Sp,S,F</u>	<u>Sp,S,F</u>
Fixed Stations ^a Sta=1,2,C1,C2, and three from 3,4,6,9, 10,12; [3-13,C3]	(1)	---	Sp,S,F	<u>Sp,S,F</u>	<u>Sp,S,F</u>	<u>Sp,S,F</u>
Intertidal Bacteria Sta=16-22,C4 Sta=16-19,C4	(2)	Sp S F	<u>Sp,S,F</u>	<u>Sp,S,F</u>	Sp S F	<u>Sp,S,F</u>
BIOLOGICAL						
Benthic Macro- invertebrates Sta= <u>1</u> ,16,17, <u>C1</u> ,C4	(<u>10</u>)	S [F]	[Sp,S,F]	[Sp,S,F]	S [Sp,F]	[Sp,S,F]
Sediment Analyses ^b Sta= <u>1</u> ,16,17, <u>C1</u> ,C4	(2)					
-TVS		Sp,S,F	[Sp,S,F]	[Sp,S,F]	S [Sp,F]	[Sp,S,F]
-Grain Size		S [F]	[Sp,S,F]	[Sp,S,F]	S [Sp,F]	[Sp,S,F]
-Sediment Pollutants		S [F]	[Sp,S,F]	[Sp,S,F]	S [Sp,F]	[Sp,S,F]
Bioaccumulation ^c						
-Field Study Sta=C4, and 16 or 17; [C1,1,16,17]	(2)		S	[S]	S	[S]
<u>OR</u> -Laboratory Study	(minimum of 2)		S	[S]	S	[S]

PROGRAM AND STATION #'S	REPLI- CATES	FREQUENCY OF SAMPLING IN PERMIT YEAR #:				
		1	2	3	4	5
TOXICS CONTROL						
Chemical Analyses (Toxic Pollutants and Pesticides)						
-Influent/Effluent Wet and dry flow, each summer	(1)	W,Sp,S	S [W,Sp]	S [W,Sp]	W,Sp,S	S [W,Sp]
-Sludge	(1)	W,S	W,S	W,S	W,S	W,S
Pretreatment						
-Toxic Pollutants and Pesticides	(1)	(same schedule as above, for Chemical Analyses)				
-Heavy Metals/Cyanide Influent/Effluent	(1)	Weekly	Monthly [Weekly]	Monthly [Weekly]	Weekly	Monthly [Weekly]
Sludge		Monthly	Monthly	Monthly	Monthly	Monthly

W,Sp,S,F=winter, spring, summer, fall

=frequency may be reduced

[]=program may be expanded

Sta=station

^a=may be implemented in years 2-5 in lieu of nonfixed station sampling

^b=at least once at every benthic station

^c=the bioaccumulation study will consist of either the field study or laboratory study, as appropriate.

b. Program component approvals and adjustments

PERMIT PART	APPROVAL/ ADJUSTMENT	DATE OF SUBMISSION/ INITIATION OF DIREC- TOR'S DETERMINATION	BASIS OF APPROVAL/ADJUSTMENT
I.B.1.	Approve monitoring program plan	3 mo from effective date of the permit	Permittee's plan must meet objectives in I.B.1.
I.B.2.	Waive final report	With submission of each draft report	Reports must adequately evaluate and interpret analyzed data.
I.B.4.	INFLUENT, EFFLUENT, AND SLUDGE MONITORING REQUIREMENTS		
a.	Increase heavy metals and cyanide monitoring to weekly	Annually, in years 2, 3, and 5	Permittee must meet objectives (1) and (5) in I.B.1.
I.B.5.	WATER QUALITY MONITORING PROGRAM		
b.(1)	Implement fixed station sampling program	Annually	Permittee must meet objectives in 5.a.
b.(2)	Adjust sampling stations	1 yr from effective date of the permit	Permittee must meet objectives in 5.a.
c.	Reduce sampling frequency of any or all water quality parameters	1 yr from effective date of the permit	Permittee must demonstrate: no change in receiving water quality with season; water quality at the ZID boundary is within receiving water quality standards or within the range at control stations.
d.	Require sampling of additional water quality parameters	Following effluent analyses	If necessary for compliance evaluation (BOD ₅ , SS); if the concentration of the parameter, following dilution of the effluent, is greater than 75% of the water quality standard (total hydrocarbons [HC]; total aromatic HC).

PERMIT PART	APPROVAL/ ADJUSTMENT	DATE OF SUBMISSION/ INITIATION OF DIREC- TOR'S DETERMINATION	BASIS OF APPROVAL/ADJUSTMENT
I.B.6. BIOLOGICAL MONITORING PROGRAM			
b. BENTHOS			
(3)	Adjust the program	End of yr 1	Permittee must meet objectives in 6.b.(1).
c. SEDIMENTS			
(3)	Adjust TVS or pollutant monitoring	Following submission and evaluation of initial TVS and pollutant data	Permittee must determine whether effluent is contributing to increased TVS or pollutant concentrations in sediments.
d. BIOACCUMULATION			
(1)	Choose lab or field study	Following submission of benthic data	Lab study, if permittee demonstrates too few organisms are available for a field study.
	Approve methods	Before study is implemented	Permittee must insure the objectives of the study will be met.
(4)	Implement in year 3 and/or 5	After data under 6.d. are submitted	Permittee must determine whether any substantial bioaccumulation has occurred.
I.B.7. TOXICS CONTROL MONITORING PROGRAM			
a.(2)	Adjust monitoring of specific pollutants to every season of every year	Following effluent sampling for pollutants each year	Permittee must determine whether the concentration at the ZID boundary exceeds 25% of the federal water quality criteria.

C. Additional Requirements.

1. Construction

The permittee shall construct and place into operation the trifurcated diffuser described in its application dated May 31, 1984, in accordance with the schedule specified in Part I.D.1.

2. Toxics Control Program

The following components of the toxics control program shall be implemented in accordance with the schedules specified in Part I.D.2.a.-c.

a. Industrial User Survey

The permittee shall update its industrial user survey annually, in accordance with the pretreatment program requirements in Sections b (1) and (6), below.

b. Pretreatment Program Requirements

(1) Implementation. The permittee shall implement the Industrial Pretreatment Program in accordance with the legal authorities, policies, procedures, and financial provisions described in the permittee's pretreatment program submission as approved EPA on April 9, 1982 and the General Pretreatment Regulations (40 CFR 403). At a minimum, the following pretreatment implementation activities shall be undertaken by the permittee:

(a) Enforce categorical pretreatment standards promulgated pursuant to Section 307(b) and (c) of the Act, prohibitive discharge standards as set forth in 40 CFR 403.5, or local limitation specified in section 26.50.040 of Chapter 26.50 of the Anchorage Municipal Code, whichever are more stringent or apply at the time of issuance or modification of an industrial waste acceptance form. Locally derived limitations shall be defined as pretreatment standards under Section 307(d) of the Act and shall not be limited to categorical industrial facilities.

(b) Issue, within one year of the effective date of this permit, industrial waste discharge permits or other similar forms to all affected industrial users. Industrial discharge permits or other similar forms shall contain limitations, sampling protocols, a compliance schedule if appropriate, reporting requirements, and appropriate standard conditions. This does not relieve the permittee, in the interim, from insuring compliance by NRDC industries with pretreatment requirements established by EPA.

- (c) Maintain and update, as necessary, records identifying the nature, character, and volume of pollutants contributed by industrial users. Records shall be maintained in accordance with Section (6), below.
 - (d) Carry out inspections, surveillance, and monitoring activities on affected industrial users to determine compliance with applicable pretreatment standards. Frequency of monitoring of industrial user's wastewaters shall be commensurate with the character and volume of the wastes, but shall not be less than two (2) times per year for NRDC industries, and one time per year for non-categorical industries where applicable.
 - (e) Enforce and obtain remedies for non-compliance by any industrial users with applicable pretreatment standards and requirements.
- (2) Implementation and Enforcement Operation Manual. Within six months from the effective date of the permit, the permittee will develop and submit to the Director for approval, a pretreatment implementation and enforcement operating manual that succinctly describes procedures for insuring compliance by industrial facilities with federal categorical standards, prohibitive standards, state standards, and local standards and prohibitions. If the permittee does not presently possess an enforcement mechanism (such as a permit) to convey pretreatment requirements on affected users, it will be required to develop such a mechanism as part of the general implementation procedures.
- (3) Responsibility to Commence an Enforcement Action. Whenever, on the basis of information provided to the Director, it has been determined that any source contributes pollutants in the permittee's treatment works in violation of subsection (b), (c), or (d) of Section 307 of the Act, notification shall be provided to the permittee. Failure by the permittee to commence an appropriate enforcement action within 30 days of this notification may result in appropriate enforcement action by EPA against the source and permittee.
- (4) Sampling. See Part I.B.7.b.
- (5) Spill Prevention. The permittee shall develop and submit to the Director for approval within nine months of the effective date of this permit, an accidental spill prevention program to reduce and prevent spills and slug discharges of pollutants from industrial users. The program, as approved by the Director, will become an enforceable part of this permit.

(6) Pretreatment Report. The permittee shall provide to the Director an annual report that briefly describes the permittee's program activities over the previous twelve months. The Agency may modify, without formal notice, this reporting requirement to require less frequent reporting if it is determined that the data in the report do not substantially change from year to year. This report shall be submitted to the addresses in Part II.D. no later than 12 months from the effective date of this permit and annually thereafter, and shall include:

- (a) An updated industrial survey, as appropriate.
- (b) Results of wastewater sampling at the treatment plant as specified in Part I.B.7.b. In addition, the permittee shall calculate removal rates for each pollutant, and provide an analysis and discussion as to whether the existing local limitations specified in Chapter 26.50.50.40.(A)(5) of the Anchorage Municipal Code continue to be appropriate to prevent treatment plant interference, pass through of pollutants that could affect water quality, and sludge contamination.
- (c) Status of Program implementation to include:
 - Any substantial modifications to the pretreatment program as originally approved by EPA, to include staffing and funding updates.
 - Any interference, upset or permit violations experienced at the POTW directly attributable to industrial users.
 - Listing of industrial users inspected and/or monitored during the previous year and summary of results.
 - Listing of industrial users planned for inspection and/or monitoring for the next year along with inspection frequencies.
 - Listing of industrial users notified of promulgated pretreatment standards and/or local standards as required in 40 CFR Part 403.8(f)(2)(iii).
 - Listing of industrial users issued industrial discharge permits or other similar forms.
 - Listing of industrial users notified of promulgated pretreatment standards or applicable local standards who are on compliance

schedules. The listing should include for each facility the final date of compliance.

- Planned changes in the implementation program.

(d) Status of enforcement activities to include:

- Listing of industrial users who failed to submit baseline reports or any other reports as required in 40 CFR 403.12(d) and in the City's pretreatment program submittal as approved on April 9, 1982.
- Listing of industrial users not complying with federal or local pretreatment standards as of the final compliance date.
- Summary of enforcement activities taken or planned against non-complying industrial users. The permittee shall provide public notice of significant violators as outlined in 40 CFR Part 403.8(f)(2)(ii).

The permittee shall notify the Director 60 days prior to any major proposed changes in its existing sludge disposal practices.

c. Nonindustrial Source Control Program

Within six months of the issuance of this permit, the following activities shall be completed and the results submitted to the Director:

- (1) Develop and adopt as necessary, ordinances to control the introduction of toxic pollutants from nonindustrial sources to the wastewater collection system. As part of this activity, ordinances to revise building codes and control the sale of toxic pollutants shall be considered.
- (2) Disposal guidelines specifying what toxic pollutants can and cannot be discharged to the sewer system and identifying alternative disposal methods for prohibited pollutants shall be developed.
- (3) Implement the control program for nonindustrial sources as contained the pretreatment program approved by EPA on April 9, 1982. As part of this program, the following shall be addressed: development of control programs for specific nonindustrial categories of sources, including a program description, method of enforcement, monitoring program, and schedule for implementation.
- (4) Provide alternative disposal methods for nonindustrial toxic pollutants such as the annual hazardous waste cleanup program.

- (5) Adopt a hazardous waste management plan for small quantity generators, including implementing ordinances.

A report shall be submitted thereafter along with each annual pretreatment report. This report shall include, for each of the above activities, its implementation status and its effectiveness in minimizing nonindustrial inputs of toxic pollutants and pesticides (including any statistical documentation).

D. Compliance Schedules.

1. Construction

The permittee shall construct and place into operation the trifurcated diffuser in accordance with the following schedule.

<u>Activity</u>	<u>Date</u>
a. Begin construction	April 1, 1986
b. End construction	October 31, 1986

2. Toxics Control Program

a. Industrial User Survey

The permittee shall submit, to the Director, an updated industrial user survey within 12 months of the effective date of this permit, and annually thereafter, as part of the pretreatment report.

b. Pretreatment Program Development

The permittee shall submit the following reports by the scheduled dates below:

<u>Activity</u>	<u>Date from the effective date of the permit</u>
Submit a pretreatment implementation and enforcement operating manual	Within six months
Accidental spill prevention program	Within nine months
Pretreatment report	Within one year and annually thereafter

c. Nonindustrial Source Control Program

The nonindustrial source control program activities specified in Part I.C.2.c. shall be completed and submitted to the Director within six months from the effective date of this permit.

A report on the status and success of the program shall be submitted along with each pretreatment report.

3. Monitoring Reports

The permittee shall submit to the Director the monitoring program plan required in Part I.B.1., within three months of the effective date of this permit.

As specified in Part I.B.2. data shall be submitted on tapes within two months of each sampling event (summarized in Part I.B.8.a.) and draft reports shall be submitted within an additional two months. Heavy metals and cyanide monitoring results shall be reported with the monthly discharge monitoring reports (Part II.D.). Final reports shall be submitted whenever requested, following review of the draft reports by the Director.

The annual written report specified in Part I.B.2. shall be submitted each year by January 31.

II. MONITORING, RECORDING AND REPORTING REQUIREMENTS

- A. Representative Sampling. Samples taken in compliance with the monitoring requirements established under Part I. shall be representative of the volume and nature of the monitored discharge.
- B. Monitoring Procedures. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- C. Penalties for Tampering. The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both.
- D. Reporting of Monitoring Results. Unless other reporting procedures have been specified in this permit, monitoring results shall be summarized each month on Discharge Monitoring Report (DMR) form (EPA No. 3320-1). The reports shall be submitted monthly and are to be postmarked by the 15th day of the following month. Legible copies of these, and all other reports, shall be signed and certified in accordance with the requirements of Part IV.G. Signatory Requirements., and submitted to the Director, Water Division and the State agency at the following addresses:

original to: United States Environmental Protection Agency
 Region 10
 1200 Sixth Avenue
 Seattle, Washington 98101

Attn: Water Compliance Section, Mail Stop 513

copy to: Alaska Department of Environmental Conservation
 Southcentral Regional Office
 437 "E" Street, Suite 200
 Anchorage, Alaska 99501

- E. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any Compliance Schedule of this permit (Part I.D.) shall be submitted no later than 10 days following each schedule date.
- F. Additional Monitoring by the Permittee. If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated.

G. Records Contents. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;
2. The individual(s) who performed the sampling or measurements;
3. The date(s) analyses were performed;
4. The individual(s) who performed the analyses;
5. The analytical techniques or methods used; and
6. The results of such analyses.

H. Retention of Records. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

I. Twenty-four Hour Notice of Noncompliance Reporting.

1. The following occurrences of noncompliance shall be reported by telephone within 24 hours from the time the permittee becomes aware of the circumstances:
 - a. Any noncompliance which may endanger health or the environment.
 - b. Any unanticipated bypass which exceeds any effluent limitation in the permit. (See Part III.G. Bypass of Treatment Facilities.)
 - c. Any upset which exceeds any effluent limitation in the permit. (See Part III.H. Upset Conditions.)
 - d. Violation of a maximum daily discharge limitation for any of the pollutants listed in the permit to be reported within 24 hours.
2. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written description shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times;

- c. The estimated time noncompliance is expected to continue if it has not been corrected; and
 - d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
3. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Compliance Section in Seattle, Washington, by phone, (206) 442-1213.
4. Reports shall be submitted to the addresses in Part II.D. Reporting of Monitoring Results.
- J. Other Noncompliance Reporting. Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for Part II.D. are submitted. The reports shall contain the information listed in Part II. I.2.
- K. Inspection and Entry. The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:
- 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - 4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

III. COMPLIANCE RESPONSIBILITIES

- A. Duty to Comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- B. Penalties for Violations of Permit Conditions. The Clean Water Act provides that any person who violates a permit condition implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing sections 301, 302, 306, 307, or 308 of the Clean Water Act is subject to a fine of not less than \$2,500, nor more than \$25,000 per day of violation, or by imprisonment for not more than 1-year, or both. Except as provided in permit conditions on Part III.G. Bypass of Treatment Facilities. and Part III.H. Upset Conditions., nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.
- C. Need to Halt or Reduce not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- E. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance include effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
- F. Removed Substances. Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

G. Bypass of Treatment Facilities:

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2. and 3. of this section.
2. Notice:
 - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.
 - b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under Part II.J. Twenty-four Hour Notice of Noncompliance Reporting.
3. Prohibition of bypass.
 - a. Bypass is prohibited and the Director may take enforcement action against a permittee for a bypass, unless:
 - (1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notices as required under paragraph 2. of this section.
 - b. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 3.a. of this section.

H. Upset Conditions.

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph 2. of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated; and
 - c. The permittee submitted notice of the upset as required under Part II.I. Twenty-four Hour Notice of Noncompliance Reporting.
 - d. The permittee complied with any remedial measures required under Part III.D. Duty to Mitigate.
3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

IV. GENERAL REQUIREMENTS

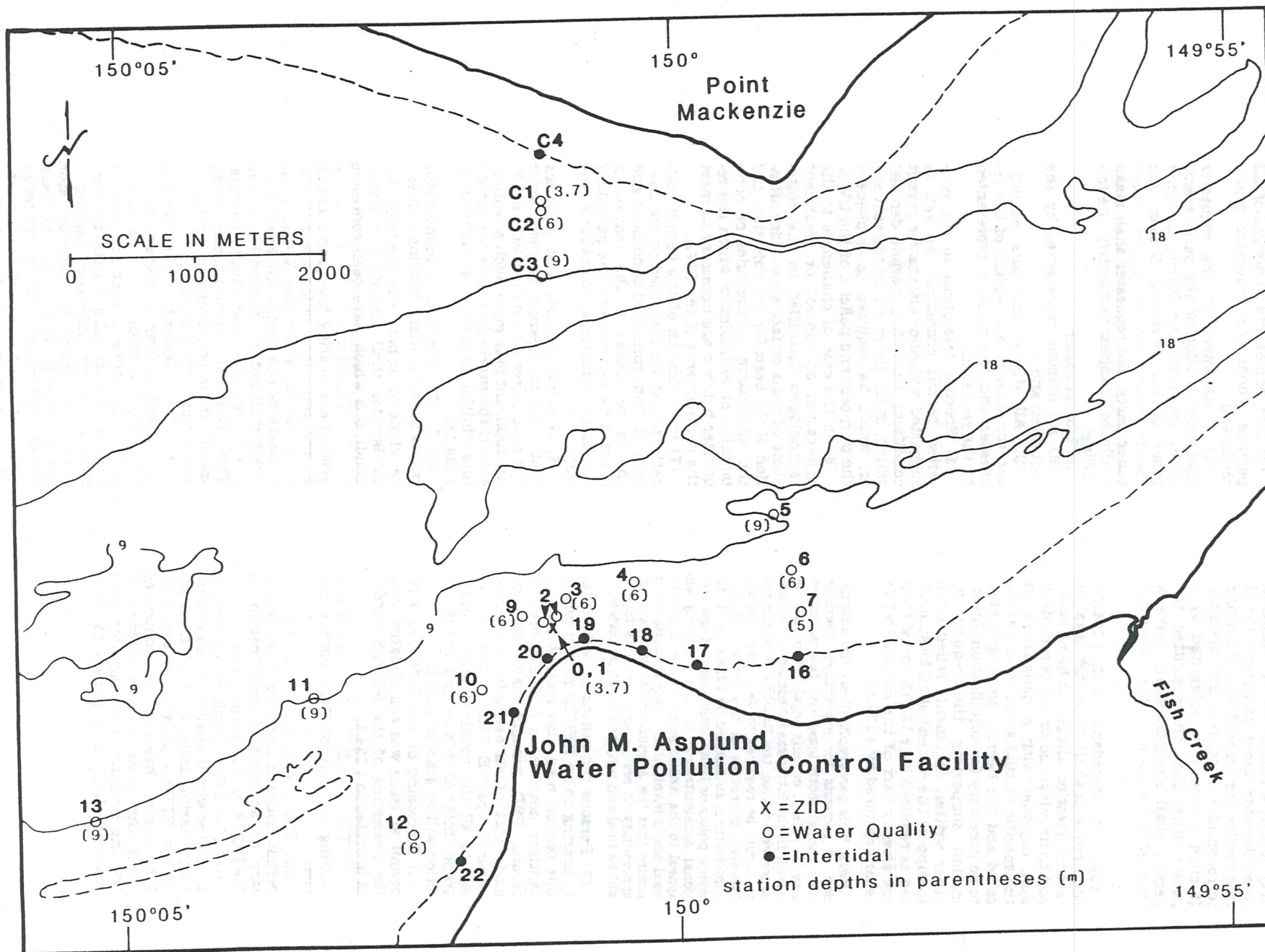
- A. Planned Changes. The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit.
- B. Anticipated Noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- C. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- D. Duty to Reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application should be submitted at least 180 days before the expiration date of this permit.
- E. Duty to Provide Information. The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.
- F. Other Information. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Director, it shall promptly submit such facts or information.
- G. Signatory Requirements. All applications, reports or information submitted to the Director shall be signed and certified.
 - 1. All permit applications shall be signed by either a principal executive officer or ranking elected official.
 - 2. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above and submitted to the Director, and

- b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
3. Changes to authorization. If an authorization under Part IV.G.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part IV.G.2. must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under the direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
- H. Penalties for Falsification of Reports. The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both.
- I. Availability of Reports. Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the State water pollution control agency and the Director. As required by the Act, permit applications, permits and effluent data shall not be considered confidential.

- J. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.
- K. Property Rights. The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
- L. Severability. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
- M. Transfers. This permit may be automatically transferred to a new permittee if:
1. The current permittee notifies the Director at least 30 days in advance of the proposed transfer date;
 2. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 3. The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2. above.
- N. State Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act.

Figure 1.



§ 124.74 Requests for evidentiary hearing.

(a) Within 30 days following the service of notice of the Regional Administrator's final permit decision under § 124.15, any interested person may submit a request to the Regional Administrator under paragraph (b) of this section for an evidentiary hearing to reconsider or contest that decision. If such a request is submitted by a person other than the permittee, the person shall simultaneously serve a copy of the request on the permittee.

(b)(1) In accordance with § 124.76, such requests shall state each legal or factual question alleged to be at issue, and their relevance to the permit decision, together with a designation of the specific factual areas to be adjudicated and the hearing time estimated to be necessary for adjudication. Information supporting the request or other written documents relied upon to support the request shall be submitted as required by § 124.73 unless they are already part of the administrative record required by § 124.18.

NOTE: This paragraph allows the submission of requests for evidentiary hearings even though both legal and factual issues may be raised, or only legal issues may be raised. In the latter case, because no factual issues were raised, the Regional Administrator would be required to deny the request. However, on review of the denial the Administrator is authorized by § 124.91(a)(1) to review policy or legal conclusions of the Regional Administrator. EPA is requiring an appeal to the Administrator even of purely legal issues involved in a permit decision to ensure that the Administrator will have an opportunity to review any permit before it will be final and subject to judicial review.

(2) Persons requesting an evidentiary hearing on an NPDES permit under this section may also request an evidentiary hearing on a RCRA or UIC permit. PSD permits may never be made part of an evidentiary hearing under Subpart E. This request is subject to all the requirements of paragraph (b)(1) of this section and in addition will be granted only if:

(i) Processing of the RCRA or UIC permit at issue was consolidated with the processing of the NPDES permit as provided in § 124.4;

(ii) The standards for granting a hearing on the NPDES permit are met;

(iii) The resolution of the NPDES permit issues is likely to make necessary or appropriate modification of the RCRA or UIC permit; and

(iv) If a PSD permit is involved, a permittee who is eligible for an evidentiary hearing under Subpart E on his or her NPDES permit requests that the formal hearing be conducted under the procedures of Subpart F and the Regional Administrator finds that consolidation is unlikely to delay

final permit issuance beyond the PSD one-year statutory deadline.

(c) These requests shall also contain:

(1) The name, mailing address, and telephone number of the person making such request;

(2) A clear and concise factual statement of the nature and scope of the interest of the requester;

(3) The names and addresses of all persons whom the requester represents; and

(4) A statement by the requester that, upon motion of any party granted by the Presiding Officer, or upon order of the Presiding Officer *sua sponte* without cost or expense to any other party, the requester shall make available to appear and testify, the following:

(i) The requester;

(ii) All persons represented by the requester; and

(iii) All officers, directors, employees, consultants, and agents of the requester and the persons represented by the requester.

(5) Specific references to the contested permit conditions, as well as suggested revised or alternative permit conditions (including permit denials) which, in the judgment of the requester, would be required to implement the purposes and policies of the CWA.

(6) In the case of challenges to the application of control or treatment technologies identified in the statement of basis or fact sheet, identification of the basis for the objection, and the alternative technologies or combination of technologies which the requester believes are necessary to meet the requirements of the CWA.

(7) Identification of the permit obligations that are contested or are inseparable from contested conditions and should be stayed if the request is granted by reference to the particular contested conditions warranting the stay.

(8) Hearing requests also may ask that a formal hearing be held under the procedures set forth in Subpart F. An applicant may make such a request even if the proceeding does not constitute "initial licensing" as defined in § 124.111.

(d) If the Regional Administrator grants an evidentiary hearing request, in whole or in part, the Regional Administrator shall identify the permit conditions which have been contested by the requester and for which the evidentiary hearing has been granted. Permit conditions which are not contested or for which the Regional Administrator has denied the hearing request shall not be affected by, or considered at, the evidentiary hearing. The Regional Administrator shall specify these conditions in writing in accordance with § 124.60(c).

(e) The Regional Administrator must grant or deny all requests for an evidentiary hearing on a particular permit. All requests that are granted for a particular permit shall be combined in a single evidentiary hearing.

(f) The Regional Administrator (upon notice to all persons who have already submitted hearing requests) may extend the time allowed for submitting hearing requests under this section for good cause.